Permit Fact Sheet

General Information

Permit Number:	WI-0061794-05-0
Permittee Name:	B&D Dairy Farm LLC
Address:	4304 N 5th Road
City/State/Zip:	Pound WI 54161
Discharge Location:	**Main Farm** – W7251 E. 6th Rd. Pound, WI 54161 ; SW ¼ of SW ¼ Section 36 T31N R20E **Heifer Facility –** W7276 E. 6th Rd., Pound, WI 54161 ; Section 25 T31N R20E **Little River Site** – 7651 Hillcrest Road, Oconto, WI 54153 NE ¼ of NE ¼ Section 34 T29N R21E & 3267 County Road A, Oconto, WI 54153 NW ¼ of NW ¼ Section 35 T29N R21E
Receiving Water:	Surface Waters of the Little Peshtigo River, Lower Peshtigo River, Little River, and Middle Peshtigo River Watersheds. Lake Michigan Basin, & groundwaters of the state.
Discharge Type:	Existing

Animal Units					
	Current AU		**Proposed AU** **(Note: If all zeroes, expansions are not expected during permit term)**		
Animal Type	**Mixed**	**Individual**	**Mixed**	**Individual**	**Date of Proposed Expansion**
Milking and Dry Cows	8190	8366	9100	9295	01/31/2026
Heifers (400 lbs. to 800 lbs.)	720	1200	1200	2000	01/31/2026
Heifers (800 lbs. to 1200 lbs.)	2640	2400	2970	2700	01/31/2026
Total	11550	8366	13270	9295	

Facility Description

Brief Facility Description B&D Dairy Farm LLC is an existing Concentrated Animal Feeding Operation (CAFO). B&D Dairy Farm LLC is owned and operated by members of the Lepianka family. It currently has 11,550 animal units and is proposing an expansion to 13,270 animal units during the permit term. Based on proposed herd size, B&D Dairy Farm LLC has approximately 225 days of available liquid waste storage and will generate approximately 75,269,861 gallons & 20,068 tons of manure and process wastewater annually. B&D Dairy Farm LLC has a total of 7,629.8 acres available for land application of manure and process wastewater. Of this acreage, 2,163.3 acres are owned and 5,466.5 acres are controlled through contracts, rental agreements, leases, or manure agreements. Of this acreage, 7,561.4 are considered spreadable acres.

Substantial Compliance Determination

Enforcement During Last Permit: No enforcement actions were taken during the previous permit term.

After a desk top review of all annual reports, NMP updates, land app reports, compliance schedule items, and a site visit on 7/18/2023 , this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by Brian Hanson on 8/2/2024.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	Sample point 001 is for liquid waste storage facility #1 (WSF #1). WSF #1 is a concrete & earthen-lined impoundment located at the main farm west of WSF #2 & north of WSF #3. This facility has a total volume of 4.9 million gallons and a maximum operating level capacity of 4.35 million gallons. This storage accepts manure and process wastewater from the original freestall barns to the north or manure from the main freestall barns that is transferred via vacuum truck. WSF #1 was constructed in 2000& 2001 & last evaluated in 2021.	
002	Sample point 002 is for liquid waste storage facility #2 (WSF #2). WSF #2 is a concrete-lined impoundment located at the main farm east of WSF #1 & north of WSF #3. This facility has a total volume of 3.5 million gallons and a maximum operating level capacity of 3.0 million gallons. This storage accepts manure and process wastewater from WSF #1 via overflow channel. WSF #2 was constructed in 2005 and has not been evaluated since the time of construction.	
003	Sample point 003 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as maternity pen bedpack, heifer bedpack, steer manure, etc. Representative samples shall be taken for each manure source type.	
004	Sample point 004 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at the main farm. The feed storage area is a concrete pad located east of the freestall barns along 3rd Road and is approximately 9 acres in area. The first 0.2" of runoff is collected & pumped to WSF 3 & the remainder of runoff from this facility flows to the vegetated treatment area on the south side of the feedpad. Proper operation and maintenance of these areas is required to ensure discharges meet permit requirements. Weekly inspections will be required and shall be recorded according to monitoring program. The feed storage area runoff controls were last evaluated in 2021.	
009	Sample point 009 is for a liquid waste storage facility (WSF #3). WSF #3 is a concrete-lined impoundment located to the south WSF & WSF #2. This facility has a total volume of 28.8 million gallons and a maximum operating level capacity of 26.4 million gallons. This storage accepts manure and process wastewater from the main freestall barns transferred via vacuum truck, manure & process wastewater from WSF #1 via overflow channel, & Leachate and runoff from the feed storage area. WSF #3 was constructed in 2011 & expanded in 2023.	
014	Sample point 014 is for manure solids removed from bottom of all liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	
015	Sample point 015 is for solid manure land applied from approved headland stacking sites. Representative samples must be taken prior to land application. Stacks are defined as part of the production area and	

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
	therefore subject to the production area discharge limitations of this permit. Weekly inspections of stack runoff controls are required and shall be recorded according to monitoring program.	
016	Sample point 016 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	
018	Sample point 018 is for solid waste stacking pad located at the main farm just west of the calf barns. The roofed stacking pad is approximately 1,000 sq ft in area and has a concrete floor & walls. This facility stores solid manure removed from the calf barns prior to land application. This facility was constructed in 2015 & was last evaluated in 2021.	
019	Sample point 019 is for liquid waste storage facility #4 (WSF #4). WSF #4 is a concrete-lined impoundment located at the Little River Site on the west side of Hillcrest Road. This facility has a total volume of 13.9 million gallons and a maximum operating level capacity of 12.7 million gallons. This storage accepts manure and process wastewater transferred from the main dairy via tanker trucks and unloaded into this facility prior to land application. WSF #4 was constructed in 2018 and has not been evaluated since construction.	
020	Sample point 020 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at the Little River Site. The feed storage area is a concrete bunker located east side of Hillcrest Road and is approximately 0.75 acres in area. This facility does not have engineered runoff controls. Proper operation and maintenance of these areas is required to ensure discharges meet permit requirements. Weekly inspections will be required and shall be recorded according to monitoring program. See schedules section for further actions required.	

Sample Point Designation For Groundwater Monitoring Systems			
System	**Sample Pt Number**	**Well Name**	**Comments**
Main Farm & Heifer Facility Production Area	801	TBD	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to

contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must submitted to the Department for approval.

The permittee currently has approximately 225 days of storage for liquid manure for the proposed expansion. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With a proposed 13,270 animal units (6,500 milking & dry cows and 4,700 heifers) , it is estimated that approximately 75,269,861gallons of manure and process wastewater and 20,068 tons of solid manure will be produced per year. The permittee owns *approximately* 2,163.3 acres of cropland and 5,466.5 are controlled through contracts, rental agreements or leases, or under manure agreements. Given the rotation commonly used by the permittee, 7,561.4 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be

updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.
The permittee is required to implement a number or practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permittee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq$12% solids) on frozen or snow-covered ground during February and March.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as "Sampling Points." For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

Sample Point Number: 001- WSF #1; 002- WSF #2; 009- WSF #3; 019- WSF #4

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Phosphorus, Available		lb/1000gal	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.1 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities.

1.1.2 Explanation of Operation and Management Requirements

Liquid manure & process wastewater must be properly stored and land applied according to the permit and nutrient management plan.

Sample Point Number: 003- Misc. Solid Manure; 014- WSF Solids; 015- Headland Stacking; 018- Solid Manure Stacking Area

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lbs/ton	Quarterly	Grab	
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.1.3 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities.

1.1.4 Explanation of Operation and Management Requirements

Solid manure sources must be properly sampled and land applied according to the permit and nutrient management plan.

Sample Point Number: 004- FSA #1; 016- Storm Water Runoff Controls, and 020- FSA #2

1.1.5 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities.

The following sample points have been removed from the permit because they were abandoned during the previous permit term and are no longer part of the production area: 005-Main Farm Animal Lot, 007-Heifer Facility Lots, 013 NW Calf Hutch Area, 017 NE Calf Hutch Area.

Sample Point 020-Little River Feed Storage Area, was added to the permit, The department determined this facility to be part of the production area for B&D Dairy Farm LLC and needs to adhere to all WPDES permit requirements.

1.1.6 Explanation of Operation and Management Requirements

Proper operation and maintenance is required to ensure unlawful discharges to waters of the state do not occur. Weekly or quarterly inspections are required and shall be recorded according to the monitoring plan.

2 Groundwater – Monitoring and Limitations

2.1 Groundwater Monitoring System for Main Farm & Heifer Facility Production Area

Location of Monitoring system: Main Farm & Heifer Facility Production Area

Groundwater Monitoring Well(s) to be Sampled: TBD

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality:

Groundwater Monitoring Well(s) Used for Point of Standards Application:

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency*
Depth To Groundwater	feet	N/A	N/A	Monthly/Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Monthly/Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.0	10	Monthly/Quarterly
Chloride Dissolved	mg/L	125	250	Monthly/Quarterly
pH Field	su	N/A	N/A	Monthly/Quarterly
pH Lab	su	N/A	N/A	Monthly/Quarterly
COD, Filtered	mg/L	N/A	N/A	Monthly/Quarterly
Nitrogen, Total Kjeldahl Dissolved	mg/L	N/A	N/A	Monthly/Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Monthly/Quarterly
Solids, Total Dissolved	mg/L	N/A	N/A	Monthly/Quarterly

*Monthly sampling is required for the first 12 months after well installation. After the first 12 months, quarterly sampling is required.

Changes from Previous Permit:

Permit Language was updated to more accurately describe groundwater monitoring requirements.

Explanation of Limits and Monitoring Requirements

Groundwater monitoring for the production area is necessary to ensure compliance with permit discharge limitations.

3 Schedules

3.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage and submit to the department.	12/01/2024

3.2 Monitoring & Inspection Program

Use of the department's monitoring and inspection program template is encouraged, but optional.

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 60 days of the effective date of this permit.	01/01/2025

3.3 Annual Reports

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

3.4 Nutrient Management Plan

Submit annual nutrient management plan (NMP) updates by March 31 of each year. Note, in addition to annual NMP updates, submit NMP amendments and substantial revisions to the department for written approval prior to implementation of any changes to the NMP.

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	
Submit NMP Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2025
Submit NMP Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Submit NMP Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Submit NMP Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Submit NMP Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

3.5 Feed Storage - Engineering Evaluation

Applicable to Sample Point 020, Little River Site Feed Storage Area only, not the runoff controls

Required Action	Due Date
Written Description of Existing System: Submit an engineering evaluation that includes a written description of the existing feed storage area and its adequacy to meet the conditions found in the Production Area Discharge Limitations subsection and NR 243.15, Wis. Adm. Code.	07/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse conditions identified as part of the engineering evaluation for the feed storage area in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	03/31/2026
Corrections and Post Construction Documentation: Complete construction of improvements to permanently correct any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2026

3.6 Runoff Control System - Installation

Applicable to Sample Point 020, Little River Site Feed Storage Area runoff controls.

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for a permanent feed storage area runoff control system for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	02/28/2025

Complete Installation: Complete construction of runoff control system. System shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	12/01/2025

3.7 Groundwater Monitoring System - Plan

Applicable to main farm and heifer facility production areas.

Required Action	Due Date
Phase 1 - Groundwater Monitoring Plan: Submit a groundwater monitoring plan consistent with the Groundwater Requirements section of the permit for the initial monitoring wells for Department review and approval. The plans shall outline the permittee's design for monitoring the production area. The submittal shall include plans and specifications for a Phase 1 groundwater monitoring plan, for Department review and approval, consistent with the Groundwater Requirements section of this permit. The Phase 1 plan must include installation of a sufficient number of groundwater monitoring wells to establish site groundwater quality and groundwater flow direction. The Phase 1 plan shall outline the permittee's design for monitoring the production area. The submittal shall include plans and specifications for installation of monitoring wells to be constructed in accordance with the requirements of ch. NR 141, Wis. Adm. Code.	5//31/2025
Phase 2 - Groundwater Monitoring Plan: Submit a Phase 2 groundwater monitoring plan, for Department review and approval, for installation of additional recommended production area groundwater monitoring wells to be constructed in accordance with the requirements of ch. NR 141, Wis. Adm. Code. The Phase 2 plan shall include the following: a detailed site characterization based on data collected during Phase 1, a summary of groundwater flow direction and seasonal variability, recommendations for the number and location of additional site groundwater monitoring wells, and a list of proposed sampling parameters and frequency. The department may require additional wells or sampling parameters to properly monitor the production area.	1/31/2027
Installation: Installation of individual wells shall be completed within 90 days following Department approval. Documentation of well construction, in accordance with ss. NR 141.065 and NR 141.23, Wis. Adm. Code, must be submitted to the Department within 60 days of installation.	

3.8 Groundwater Monitoring System - Reporting

Applicable to main farm and heifer facility production areas.

Required Action	Due Date
Quarterly reporting to the department: Quarterly reporting of groundwater monitoring data is required. Quarterly reports shall be submitted to the department within 45 days of the last sample event for that quarter via electronic groundwater monitoring forms.	
Annual Reporting to the department: An annual report that includes, the past year’s tabulated groundwater monitoring data, site groundwater level contour maps and an assessment of the cause and significance of any substance detected in groundwater at a concentration above a ch. NR 140 Preventive Action Limit, shall be submitted by January 31 each year. Any updates to the groundwater monitoring workplan shall also be included in this report.	

3.9 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	05/01/2029

3.10 Explanation of Schedules

Emergency Response Plan, Monitoring and Inspection Program – Schedules consistent with permit requirements.

Annual Reports, Nutrient Management Plan, Submit Permit Reissuance Application - Schedules consistent with permit requirements.

Schedule 3.5 & 3.6 were included to ensure the feed storage area described in sample point 020 at the Little River Site meets permit discharge limitations. The feed storage area was not previously approved or evaluated by the department, therefore requires an evaluation under NR 243.16. The feed storage area does not have engineered runoff controls, therefore plans & specification must be submitted per NR 243.15 prior to installation of runoff controls.

Schedules 3.7 & 3.8 are for Groundwater Monitoring: The department may require the installation of groundwater monitoring wells under s. NR 243.15(7) to evaluate impacts to groundwater when geologic and construction conditions warrant monitoring. The attached memo from Bill Phelps (hydrogeologist) dated August 16, 2018 describes the geology of the B&D production site as "…an area susceptible to groundwater contamination." Recent sampling of groundwater has confirmed the presence of nitrate in exceedance of the Preventative Action Limit (PAL) at the main farm production site. The main farm and heifer facility production areas include a number of manure storage facilities, runoff control structures, and other treatment systems (vegetated treatment area) specified in s. NR 243.15(7). Several of these facilities require evaluation for reasons described in this section.

Chapter NR 140, Wis. Adm. Code, establishes state groundwater quality standards that apply to all facilities, practices and activities which may affect groundwater quality, and which are regulated by the department under chs. 281 and 283, Stats. The department regulates large concentrated animal feeding operations (CAFOs) under chs. 281 and 283, Stats. In accordance with s. NR 243.13(5), Wis. Adm. Code, all permitted large CAFOs are required to comply with state groundwater quality standards. Monitoring of the calf facility water supply well at the B&D Dairy production site has shown nitrate levels exceeding ch. NR 140 groundwater quality standards for that contaminant. Chap. NR 140 directs the department to assess the cause and significance of concentrations of contaminates in groundwater above state groundwater quality standards, and to determine appropriate response actions to minimize the concentration of contaminants in groundwater and prevent exceedances of ch. NR 140 Enforcement Standards.

Special Reporting Requirements

None

Other Comments:

There is a discrepancy in the total proposed annual manure generation volume between the NMP Conditional Approval Letter & the 180 Days of Storage Review Letter. The 180 Days of Storage letter contains a typo in the 2nd chart. The

correct proposed manure generation volume for both is in the NMP Conditional Approval letter and is 75,269,861 gallons. The correct volume was used in the days of storage calculation & remains at 225 days.

Attachments:

Map(s)

Plan Approval Letter(s)

- 3/7/2024 Days of Storage Review Letter
- 3/22/2024 NMP Conditional Approval Letter

8/11/2023 Reissuance Inspection Report

Memo from Bill Phelps (DNR Hydrogeologist) dated August 16, 2018

Public Notice

Expiration Date:

October 31, 2029

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Brian Hanson Wastewater Specialist Date: 9/5/2024

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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Tony Evers, Governor
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March 22, 2024

Marinette County
Approval

Brian Lepianka
B&D Dairy Farm LLC
4304 N 5th Road
Pound, WI 54161

SUBJECT: Conditional Approval of B&D Dairy Farm LLC Nutrient Management Plan, WPDES Permit No. 0061794-05-0

Dear Mr. Lepianka:

After completing a review of B&D Dairy Farm LLC 2024-2028 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with Nutrient Management Requirements in s. NR 243, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends B&D Dairy Farm LLC review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in B&D Dairy Farm LLC may have:

- Soils that may have bedrock or groundwater within 24 inches of surface,
- Multiple setback areas due to streams, conduits to streams, grassed waterways, wetlands or wells, and
- Evidence of possible soil erosion/flow channels. Note: road ditches or other man made channels may be considered flow channels or conduits to navigable water and may be subject to a SWQMA and setback.

Reviewing the NMP and checking fields for these features and soil conditions prior to manure applications will help B&D Dairy Farm LLC maintain compliance with their WPDES permit and Ch. NR 243 requirements.

B&D DAIRY LLC NMP CONSIDERATIONS:

- Due to the planned expansion and increase in manure generation, it is recommended that B&D Dairy LLC acquire additional land application acreage in order to have flexibility in land application. The land base currently can accommodate the current generation numbers and the planned generation numbers; however, the land base becomes very tight after the expansion.
- Currently B&D Dairy LLC has the DNR wetland layer on a separate restriction map than the other surface restrictions. It is recommended that the wetland layer be included with the other restriction layers on the maps to ensure the 25ft setback is met when land applications takes place.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 11,550 animal units (5,850 milking & dry cows and 3,600 heifers). A planned herd size of 13,270 animal units (6,500 milking & dry cows and 4,700 heifers) by 2024.
2. Manure generation and spreading records indicate your current herd will annually generate approximately 64,481,948 gallons of manure and process wastewater and 9,324 tons of solid manure. After the planned expansion your herd will annually generate approximately 75,269,861gallons of manure and process wastewater and 20,068 tons of solid manure.
3. The use of application restriction options 1 and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That B&D Dairy Farm LLC currently has 7,629.8 acres (2,163.3 owned and 5,466.5 controlled through contracts, rental agreements or leases, or under manure agreements) of which 7,561.4 are spreadable acres.
6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Little River (listed 303(d) impaired water by 'Total Phosphorus') and WBIC 5010743 (listed 303(d) impaired water by 'Unknown Pollutant').
7. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters including 'South Branch Beaver Creek, Murphy Creek, and North Branch Beaver Creek'.
8. That no fields are tiled.
9. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
10. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2024-2028 B&D Dairy Farm LLC Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.

2. The following fields have also been approved to receive industrial, municipal, or septage waste:

Field Name	Other Permittee Name	Other Permittee Field Name	DNR #
Pasdera West	Saputo Cheese USA Inc Lena	507	113443
Wied Ernest South	Harding Septic LLC	5	46183
Denow J HF East	Marinette Wastewater Utility	46	21616
Cole NE	Marinette Wastewater Utility	RC-1	95629

Prior to any manure applications on these fields B&D Dairy Farm LLC shall contact the entities listed above to obtain recent spreading records and make the necessary adjustments to the planned manure application rates. At the end of each year B&D Dairy Farm LLC shall contact each entity listed above to obtain spreading records from the previous year so that they can be properly tracked in the NMP. Please Note: B&D Dairy Farm LLC is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

3. The following fields are prohibited from receiving applications of manure or process wastewater due to using default soil test values:

- 22 Bichls
- 22 Champagne S
- 22 Cub East
- 22 Cub West
- 22 Deer Camp East
- 22 Deer Camp South
- 22 Deer Camp West
- 22 Peterson
- 22 Seewald
- 22 Tylers

If B&D Dairy Farm LLC wishes to use these fields for applications of manure or process wastewater all necessary information shall be submitted to the Department prior to application to demonstrate compliance with NR 243 and other applicable codes. Written Department approval amending this condition approval must be received prior to application.

4. If existing fields yield a soil test results equal to or greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.

5. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent NH_4-N, percent NO_3-N, phosphorus, potassium, and sulfur.

6. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, B&D Dairy Farm LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = NH_4\text{-N} + [0.25 \times (\text{Total N} - NH_4\text{-N})]$$

7. B&D Dairy Farm LLC shall record daily manure applications by using form 'Daily Logs and Manure Recording'. These forms shall be retained at the farm and provided to the department upon request.

8. B&D Dairy Farm LLC shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using the SNAP+ Annual Spreading Report.

WINTER SPREADING

9. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.

10. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
    - SEE APPENDIX A FOR LIST OF APPROVED FIELDS

11. The following field(s) are denied for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

- Caylor Boemke
- Wojtkiewicz

12. Winter spreading of solid and liquid manure may not occur during the "high risk runoff period" pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.

13. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.

14. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

15. The following sites are approved for stacking in the month of February and March AND during non-winter conditions:

- Clement
- Rosner North
- Czern
- Steer E
- Puerto Big
- Ron Pion E (North site only)

16. The following sites are **denied** for headland stacking:

- Alex West (both sites)(does not meet slope requirements)
- Ron Pion E (south site)(does not meet slope requirements)
- Bachowlak (does not meet slop requirements)
- Tarmen (stacking not located within a field boundary)
- Puerto Black (does not meet slope requirements)

MANURE & PROCESS WASTEWATER IRRIGATION

17. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

18. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or locate permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 715-839-3775 or Aaron.Orourke@Wisconsin.gov.

Sincerely,

Aaron O'Rourke
WDNR Nutrient Management Program Coordinator
Wisconsin Department of Natural Resources

cc: Brian Hanson, WDNR Agricultural Runoff Specialist (Brian.Hanson@Wisconsin.gov)
Joe Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Chris Clayton, WDNR Ag Runoff Section Chief (Christopherr.Clayton@Wisconsin.gov)
Ashley Scheel, WDNR CAFO NMP Reviewer (Ashley.Scheel@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Sheri Denowski, Marinette County (sheri.denowski@marinettecountywi.gov)
Eric Paulson, United Cooperative (ericp@unitedcooperative.com)
File

APPENDIX A: APPROVED Winter spreading field list.

Field Name	Winter Spreadable Acres	Max Rate	Total Manure Volume	Acute Winter PI with Maximum Rate(Liquid manure)		Field Name	Winter Spreadable Acres	Max Rate	Total Manure Volume	Acute Winter PI with Maximum Rate(Liquid manure)
Alex East	43.7	3500	152950	1		Linda SW	5.5	3500	19250	1
Alex West	25.3	3500	88550	1		List S	15.4	3500	53900	0.9
Bedora K 3	12.1	3500	42350	1		Little River E	17.9	3500	62650	1
Bedora K 4	6.9	3500	24150	1		Little River W	7.7	3500	26950	0.2
Bedora K 5	9.7	3500	33950	0.8		Macha	5.3	3500	18550	1

Behnke Big	18.1	3500	63350	0.8		Maple Grove School Rd	9	3500	31500	1.1
Behnke East	6.9	3500	24150	0.2		Margis NE	10.6	3500	37100	1.1
Blachowiak Dump	5.6	3500	19600	0.2		Margis SE	5	3500	17500	1.1
Blachowiak East RR	4.8	3500	16800	0.2		Margis W	47.1	3500	164850	1
Blachowiak Farm	11.6	3500	40600	0.2		Myron HF Big	32.4	3500	113400	1
Buddy Big	14	3500	49000	0.2		Ner NE	34.3	3500	120050	1.2
Buddy N of Drive	8	3500	28000	0.8		Ner NW	79.6	3500	278600	1.2
Caylor Deer Pen	5.2	3500	18200	0.2		Ner SE	41.3	3500	144550	1.2
Caylor NW	7.1	3500	24850	0.2		Ner SW	84.9	7000	594300	2.2
Caylor West	7.1	3500	24850	0.2		Neuens	9.9	3500	34650	1
Caylor	25.9	3500	90650	0.2		Pasdera East	17.1	3500	59850	1
Cheese North	35.5	3500	124250	0.9		Pasdera Pond	19.9	3500	69650	1
Clement	20.5	3500	71750	1		Pasdera West	5	3500	17500	1
Cole NE	18.2	3500	63700	0.2		Patz North	12.6	3500	44100	1
Czern Graetz	14.3	3500	50050	0.2		Patz Railroad	16.9	3500	59150	0.8
Czern Kertesz East	22.7	3500	79450	0.2		Patz West	27.4	3500	95900	1.1
Czern Kertesz Oak Tree	9.2	7000	64400	0.3		Pillath	10	3500	35000	0.2
Czern Kertesz West	22.6	3500	79100	0.2		Polzin	52.4	3500	183400	1
Czern Leo M	25.2	3500	88200	0.2		Prue Back	24.2	3500	84700	1

Czern Pond	53.6	3500	187600	0.2		Prue House	5.9	3500	20650	1
Czern Wood Yard	40.5	3500	141750	0.2		Prue West	21.6	3500	75600	1
Danette	69.2	3500	242200	0.2		Puerto Back	27.2	3500	95200	1
Denow J 64 South	5.8	3500	20300	1		Puerto Big	27.5	3500	96250	1.1
Denow J Christeck	4.9	3500	17150	1.1		Puerto Harvey	8.7	3500	30450	0.2
Denow J HF East	31	3500	108500	1.1		R and A	18.6	3500	65100	1.1
Denow J HF West	18.9	3500	66150	1.1		Rakow Graetz	10.5	3500	36750	1.1
Denow J Son N	7.3	3500	25550	1.1		Rakow Gravel East	29.5	3500	103250	0.2
Denow J Son S	17.5	3500	61250	1.1		Rakow Gravel West	20	3500	70000	0.2
Denow J Townline	15.1	3500	52850	1		Rakow House	66.5	3500	232750	1.1
ErvBoer N	66.9	3500	234150	1		Renaud Kim East	19.4	3500	67900	1
Glenn on P North	5.6	3500	19600	1		Renaud Kim River	7.5	3500	26250	1.1
Goddard South	15.5	3500	54250	0.2		Rickling	6.1	3500	21350	0.9
Gould Apple C	4.7	3500	16450	1		Ron Pion East	11	3500	38500	0.2
Gould Apple E	6.6	3500	23100	1		Rosner North	9.9	3500	34650	0.2
Gould Apple S	7.8	3500	27300	1		Rusch Zach	10.5	3500	36750	1.2
Gould Big 64	22.9	3500	80150	1		Ryan Polzin	20.4	3500	71400	1
Gould Bridge	7.4	3500	25900	1		Salesky 64 SE	10.7	3500	37450	0.2
GR East North	58.3	3500	204050	1.1		Salesky North	44.6	3500	156100	1
GR East South	40	3500	140000	0.9		Sawinski	13.5	3500	47250	1.1

GR HF North	22.4	3500	78400	0.9		Schulz Big	54.5	3500	190750	1.1
GR HF South	23.6	3500	82600	0.8		Seymour	50	3500	175000	1
Gus Elgin E	21.4	3500	74900	0.2		Sokol East	12.1	3500	42350	1.1
Gus Elgin HF N	10.3	3500	36050	1.1		Sokol North	13.5	3500	47250	0.2
Gus Elgin HF S	8.1	3500	28350	0.2		Sokol West	17.9	3500	62650	0.2
Gus Elgin Sokol N	16.1	3500	56350	0.2		Steer E	9.4	3500	32900	0.9
Gus Elgin Sokol S	9.9	3500	34650	0.2		Steer W	5.9	3500	20650	0.9
Gus Elgin W	18.4	3500	64400	0.2		Swering a N	6.5	3500	22750	0.9
Gus Ervin E	23.1	3500	80850	1.1		Swering a S	6.7	3500	23450	0.9
Gus Ervin W	10.9	3500	38150	1		Tachick Barn	31.5	3500	110250	1.1
Gus Roger Big	5.4	3500	18900	1.1		Tachick House	8.4	3500	29400	1.2
Gus Roger Peter	10.2	3500	35700	1		Tachick West	12	3500	42000	1.1
Jensen Brian	24.6	3500	86100	1		Taraska E	3.8	3500	13300	0.2
Jensen Bunkers	7	3500	24500	1		Taraska W 141	21.5	3500	75250	0.2
Jensen by 3rd	3.4	3500	11900	1.1		Taraska W	30.5	3500	106750	1.1
Jensen by River	8.8	3500	30800	0.2		Tarman East	32.9	3500	115150	1
Jensen Calf	5.9	3500	20650	1		Tarman West	12.3	3500	43050	1
Jensen Home S	5.3	3500	18550	1.1		VanDrise N	13.9	3500	48650	1
Joe Pion East	12.8	3500	44800	0.2		VanDrise S	30.2	3500	105700	1
Joe Pion West	25	3500	87500	0.2		Vern Weed by River	27.9	3500	97650	0.2

Joes North	34.5	3500	120750	1.1		Vern Weed E	15.7	3500	54950	0.2
Johnson Randy	12.1	3500	42350	0.8		Vern Weed W	4.1	3500	14350	0.8
Johnston Dan	24.5	3500	85750	1.1		Viesten z 1	30.9	3500	108150	1.1
Josh Mom Big	6.1	3500	21350	1.1		Viesten z 2	10.3	3500	36050	1.1
Kay	41.6	3500	145600	1		Viesten z 3	32.4	3500	113400	1.2
Krause Big	16.5	3500	57750	1.1		Wied Brian East	8.8	3500	30800	0.8
Lange East	24.8	3500	86800	1.1		Wied Ernest South	39.4	3500	137900	1
Lange North	14.9	3500	52150	1.1		Wilcox Northeast	12.7	3500	44450	0.9
Lange West	12.5	3500	43750	1		Wilcox West	35	3500	122500	0.9
						Wood Joe	29.9	3500	104650	1

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor
Adam N. Payne, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

March 7, 2024

FILE REF: R-2024-0020
WPDES Permit #: WI-0061794

Brian Lepianka
B&D Dairy Farm LLC
4304 N 5th Road
Pound, WI 54161

Subject: Days of Storage Review for B&D Dairy Farm LLC, NW¼ NW¼ of T31N, R20E, Section 36 in Beaver Township, Marinette County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Lepianka:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has completed its review of the calculation of days of storage submitted under certification by Nick Coady, GHD on January 8, 2024 on behalf of B&D Dairy Farm LLC.

The Department reviewed the submitted calculations in accordance with ss. NR 243.14(9) and NR 243.15(3)(i) to (k), Wis. Adm. Code. Under s. NR 243.17(3)(c), Wis. Adm. Code, the permittee shall demonstrate compliance with the 180-day design storage capacity requirement at specified times. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Days of Available Liquid Waste Storage: The submitted information states that B&D Dairy Farm LLC has 225 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The largest proposed number of animal units provided for the calculation is 13,270. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values and a collection period of 365 days. The first 0.2 inch flush runoff from the existing feed storage area is captured in permanent storage with the remainder going to a VTA.

Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
WSP #1	4,904,026	0	140,794	0	412,308	4,350,924
WSP #2	3,465,045	0	112,402	0	327,328	3,025,315
WSP #3	28,755,260	0	607,127	0	1,787,139	26,360,994
Sat. WSP	13,934,650	0	322,436	0	947,847	12,664,367
					Total MOL Vol:	46,401,600
					Days of Storage:	**225**

Liquids Collected/Stored	**Annual Gallons**
Manure, Bedding, and Wastewater	66,248,000
Feed Storage Leachate	299,200
Feed Storage Runoff Collected (0.2” Flush)	2,736,161
Net Precipitation on Storage Surfaces	5,950,500
TOTAL:	**71,236,611**

Should you have any questions, please contact Tony Salituro, DNR Madison office or your regional CAFO Specialist.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Bernie Michaud, P.E.
CAFO Engineer Supervisor
Watershed Management Program

Tony Salituro, EIT
CAFO Engineer
Watershed Management Program

Email:
Brian Lepianka; B & D Dairy
(715) 923-0772; brian.lepianka@gmail.com

Nicholas Coady; GHD Services
(920) 490-1663; Nicholas.Coady@ghd.com

Sheri Denowski; Marinette County LWCD
(715) 732-7783; Sheri.Denowski@marinettecounty.com

Matt Woodrow; DATCP
(920) 427-8505; matthew.woodrow@wisconsin.gov

Brian Hanson; DNR-Northeast Region
(920) 366-3302; brian.hanson@wisconsin.gov

Joe B Baeten; DNR-Northeast Region
(920) 366-2072; Joseph.Baeten@wisconsin.gov

Anthony Salituro; DNR-Central Office
(608) 444-2869; anthony.salituro@wisconsin.gov

Aaron O'Rourke; DNR, Eau Claire
(715) 839-3775; aaron.orourke@wisconsin.gov

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8/11/2023

Brian Lepianka
B&D Dairy Farm LLC
4304 N 5th Road
Pound, WI 54161

WPDES Permit No. WI-0061794-04-1
Marinette County

Subject: 7/18/2023 Permit Reissuance Compliance Inspection

Dear Mr. Lepianka:

On July 18th, 2023 the Department of Natural Resources met with the representatives of B&D Dairy Farm LLC to conduct a full compliance inspection of your facility for permit reissuance. Department observations, including photographs, and a record of our conversations are included in the enclosed report.

The final pages of the report include a summary section identifying areas of concern & action items the farm should continue to monitor.

If you have any questions regarding this letter or your WPDES permit requirements, please contact me at 920-366-3302 or brian.hanson@wisconsin.gov.

Sincerely,

Brian Hanson

Brian Hanson
Agricultural Runoff Management Specialist

Enc: 7/13/2023 Inspection Report

Electronic copy: Sheri Denowski - Marinette County
Joe Baeten, Falon French - DNR
Eric Paulson – United Coop

CAFO Compliance Inspection Report

Inspection Date: 7/18/2023 Report Final Date: 8/11/2023

Operation Name: B&D Dairy Farm LLC

WPDES Permit #: WI-0061794-04-1

Farm Address: **Main Dairy** - W7251 E. 6th Road Road Pound, WI 54161 ; Sec 36 T31N R20E

Heifer Facility– W7276 E. 6th Road, Pound, WI 54161 ; Sec25 T31N R20E

Little River Satellite WSF - 7651 Hillcrest Road, Oconto, WI 54153 ; Sec 34 T29N R21E

On-Site Representative(s): Brian Lepianka, Reily Lepianka—Owners & Operators

Report Author: Brian Hanson: DNR Agricultural Runoff Specialist

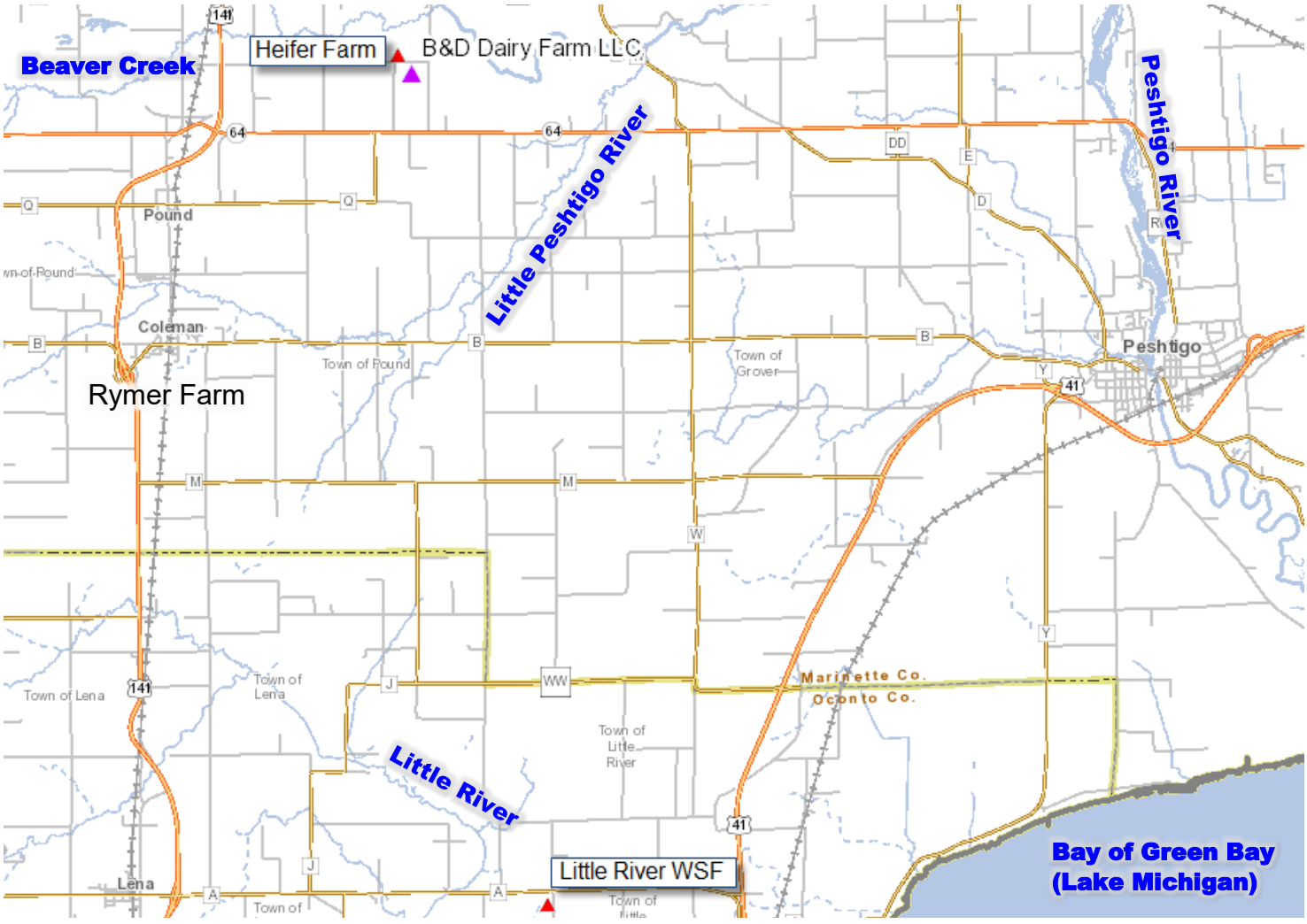
Other Participating Agencies: Eric Paulson, Kaitlyn Hodkiewicz—United Coop ;

Trent Brenny—DNR ; Nick Coady—GHD

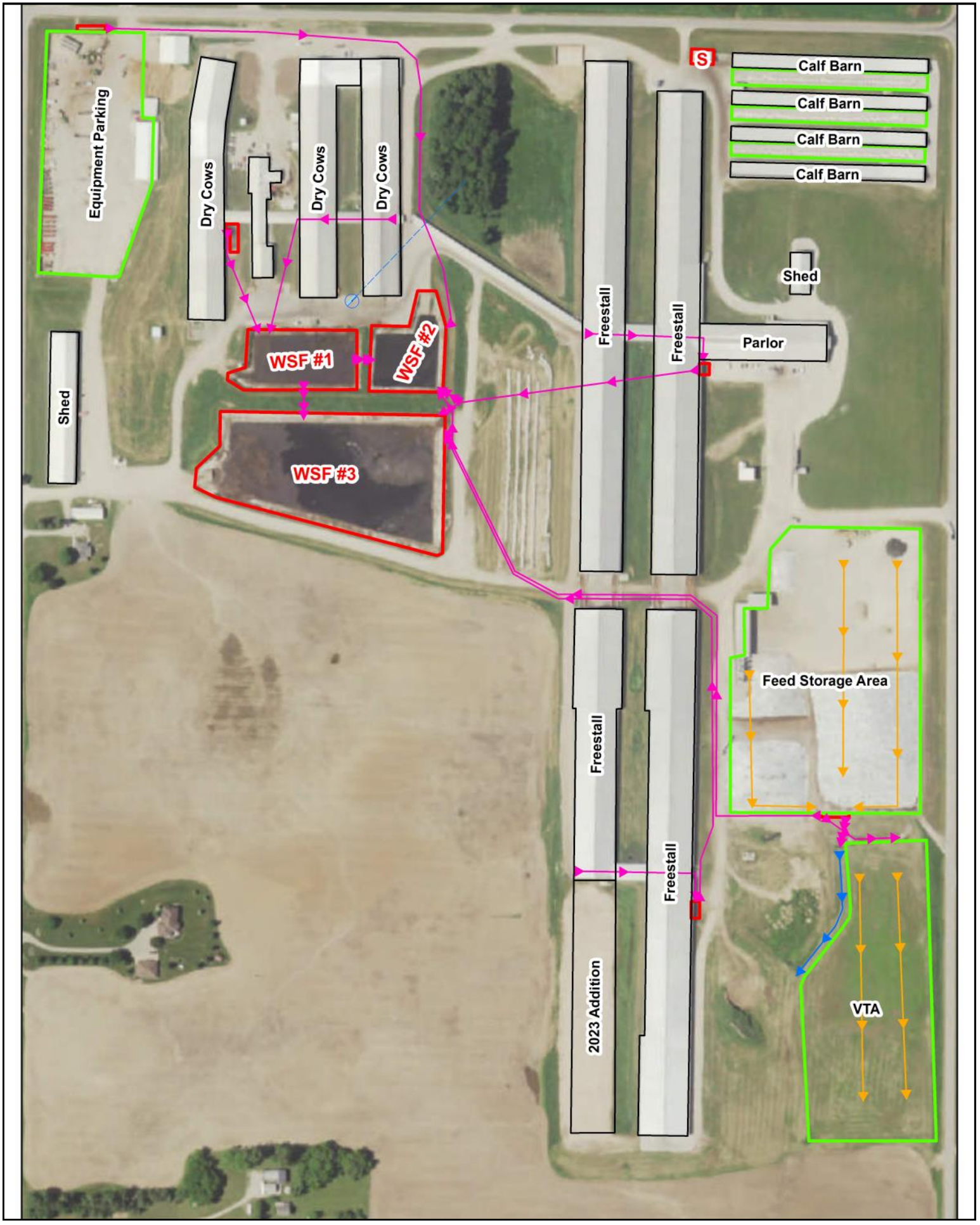
Introduction

On Tuesday July 18, 2023 Hanson & Brenny met with Lepianka, Lepianka, Coady, Paulson & Hodkiewicz at 13:00 at B&D Dairy Farm LLC site to conduct a permit reissuance walkover inspection. All 3 sites in the permit were inspected. A heavy downpour occurred at the beginning of the inspection but for the remainder of the inspection temperatures were in the 80's and cloudy. No permit violations were observed, and no water samples were collected. Hanson & Brenny departed at approximately 15:45.

Sit



Site Overview Diagram (Main Dairy: orange lines =potential runoff flow patterns, blue lines = stormwater flow, pink lines = waste transfer system,)



Site Overview Diagram (Heifer Farm: orange lines =potential runoff flow patterns, blue lines = stormwater flow, pink lines = waste transfer system)

Site Overview Diagram (Little River WSF: orange lines =potential runoff flow patterns, blue lines = stormwater flow, pink lines = waste transfer system,)

SITE OBSERVATIONS :

Feedlot Runoff

There are no longer any feedlot runoff systems located on the farm. There we previously 2 outdoor drive by feeding lots located between the barns at the heifer farm north of East 6th Road. These lots were depopulated and abandoned in 2022. At the time of inspection the east lot had been completely dismantled, whereas the west lot still had some headlocks present, but was not in use.

Calf Hutch Areas

There are no longer any calf hutch areas located on the farm. All calves and youngstock are raised under roof in permanent buildings on the farm or raised offsite. There were previously 2 calf hutch areas in use. The first was referred to as the NW calf hutch area. This area was located in the northwest corner of the production site at the main dairy. The hutches were housed on a concrete pad that was part of a former feed storage area. Runoff was collected by an existing runoff collection system and pumped to WSF #2. This calf hutch area was abandoned in 2019 and has not been used since. The runoff collection system is still in place, but is not currently used as the area has been converted into an equipment storage area. The second calf hutch area was referred to as the NE calf hutch area. This area was located in the northeast corner of the production site at the main dairy. Hutches were placed on a concrete surface with a row of hutches between each of the calf barns. The area did not have any engineered runoff controls. This calf hutch area was depopulated in 2022. At the time of the inspection the calf hutches were still present, but not in use. During the inspection, Hanson questioned about the area east of WSF #3. According to recent aerial photos, this area appeared to contain a multitude of calf hutches, Lepianka explained that this area was not used to house animals, but that it was only used as a storage area for unused hutches. At the time of inspection no animals were present and vegetation growth indicated that no activity has taken place in this area in recent months.

Waste Storage Facilities

There are 4 liquid waste storage facilities located on the farm. Three are located at the main dairy and one is located at the Little River Satellite WSF Site a few miles south of the main farm. Most of the manure generated onsite is collected by vacuum trucks and manually dumped into the Waste Storage Facilities. The freestall barns at the main dairy do have a center collection channel that collects excess liquid. The system from the original freestall barns is pumped to WSF #1 and the newer freestall barns is pumped to WSF #3.

WSF #1 is a concrete lined impoundment located south of the original freestall barns that was constructed in 2000. In 2001 the facility was expanded by adding approximately 2' of clay liner above the concrete liner. This facility has a concrete access ramp located in the southwest corner to aid in the removal of sand-laden manure solids. WSF #1 is connected to WSF #2 via concrete overflow channel. A concrete overflow channel to WSF #3 was added in 2023 as part of WSF #3 expansion project. WSF #1 was last evaluated in 2021 and required no further action.

WSF #2 is a concrete lined impoundment located east of WSF #1 that was constructed in 2005. This facility has a concrete access ramp located in the northeast corner to aid in the removal of sand-laden manure solids. WSF #2 is connected to WSF #1 via concrete overflow channel.

WSF #3 is a concrete lined impoundment located south of WSF #1 & WSF #2 that was constructed in 2011. At the time of inspection , the WSF #3 expansion project was about 50% complete. The purpose of this expansion project was to raise the height of the concrete liner to a similar elevation as the other WSF's, increasing the available storage volume. This facility has a concrete access ramp located in the southwest corner to aid in the removal of sand-laden manure solids. A concrete overflow channel to WSF #1 was added in 2023 as part of WSF #3 expansion project.

WSF #4 is a concrete lined impoundment located at the Little River Satellite Pit site that was constructed in 2018. This facility has a concrete access ramp located in the northeast corner to aid in the removal of sand-laden manure solids. This storage accepts manure and process wastewater transferred from the main dairy via tanker trucks and unloaded into this facility prior to land application.

A solid manure storage area is located in the northwest corner of the calf barns. Solid manure & bedding from the calf barns is temporarily stored here until land application. The storage area is roofed and required no further action when it was last evaluated in 2021.

Solid and liquid waste storage structures are well-maintained, in good repair, and in compliance with permit requirements. Liquid waste storage facilities have permanent markers installed. See photo log for details.

Process Wastewater (other than feed storage area leachate/runoff)

Milking parlor washwater at the Main Dairy is collected & stored in the WSF's

Animal Mortality Disposal

Mortalities are picked up daily as needed by Circle R. Mortalities are usually placed in the end of barn north of WSF #1

Feed Storage Area (FSA) Runoff

All feed storage areas and runoff controls are located at the main dairy in the southeast corner of the production area. The feed storage area consists of one large concrete pad. This pad generally slopes to the south and to the center. A large reception tank sits on the south edge of the feedpad. All leachate and runoff is directed to the reception tank. Leachate and first flush runoff is pumped to WSF #3 for long term storage. Additional runoff is directed to a concrete spreader pad & vegetated treatment area (VTA) on the south side of the feedpad. This runoff then flows south through the VTA. If the primary overflow pipe that feeds the spreader bar cannot keep up, there is a secondary overflow pipe that diverts additional runoff to a vegetated swale along the west side of the VTA. At the time of inspection, a brief, but heavy rainfall event was just finishing and runoff flow on the feedpad was observed to be flowing into the reception tank and being pumped to WSF #3. No significant amount of runoff was flowing to the concrete spreader pad or the secondary overflow channel. Maintenance on the upper end of the VTA had recently occurred and vegetation was beginning to reestablish. Evidence of straw left over from the planting was still visible in this portion of the VTA. There were no visible signs of concentrated flow channels or significant ponding in the VTA. The southern portion of the VTA that did not receive recent maintenance was densely vegetated and appeared in good condition. Mowing and harvesting of this area should be completed in the near future as part of ongoing operation & maintenance. The secondary runoff swale was also well vegetated and shows no sign of concentrated flow channels or ponding.

The runoff control systems are well-maintained, in good repair and in compliance with permit requirements. The feed storage runoff controls were last evaluated in 2021 and required no further action.

Ancillary Service Areas

Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.). At the time of the inspection, all stormwater channels were well vegetated and other areas were free of manure & feed solids. The farm should continue to manage these areas to minimize the chance of runoff from the production area.

The farm does have not have any CAFO outdoor vegetated areas as part of their operation.

RECORDS REVIEW

The permittee has current WPDES Permit and Nutrient Management Plan onsite, is located in office.

The permittee provided complete production site inspection records that are required to be retained. Daily Hauling logs, Inspection Logs for required inspections and manure pit volume logs were all available for inspection.

The permittee provided adequate documentation that the facility has a minimum of 180 days of liquid manure storage capacity.

The permittee provided land application records to demonstrate compliance with nutrient management plan requirements.

The permittee has copies of their emergency response and monitoring and inspection plans onsite.

The permittee is up to date on required reporting and actions as specified in the Schedules section of permit with the exception of schedule 3.5 & 3.6 . Schedules 3.5 & 3.6 in regards to groundwater monitoring have not yet been completed. These requirements are subject to judicial review of the department’s decision to include them in the permit and, in accordance with s 283.63(1)(am), Wis. Stat. are not effective until such review is complete.

Photo #:	7514
Date/Time of Photo:	7/18/2023 15:02
Photo By:	Brian Hanson
Photo Location:	Heifer Farm Outdoor Lot

Photo Description:

Standing on the south end of the west lot looking north: View of the west outdoor lot that has been abandoned.

Photo #:	7518
Date/Time of Photo:	7/18/2023 15:03
Photo By:	Brian Hanson
Photo Location:	Heifer Farm Outdoor Lot

Photo Description:

Standing on the north end of the east lot looking south: View of abandoned east lot. Notice all post and headlocks have been removed.

Photo #:	7424
Date/Time of Photo:	7/18/2023 14:39
Photo By:	Brian Hanson
Photo Location:	Main Dairy NE Calf Hutch Area

Photo Description:

Standing on the west side of calf barns looking east: View of abandoned calf hutches in-between south 2 calf barns.

Photo #:	7429
Date/Time of Photo:	7/18/2023 14:40
Photo By:	Brian Hanson
Photo Location:	Main Dairy NE Calf Hutch Area

Photo Description:

Standing on the west side of calf barns looking east: View of abandoned calf hutches in-between north 2 calf barns.

Photo #:	7505
Date/Time of Photo:	7/18/2023 14:57
Photo By:	Brian Hanson
Photo Location:	Main Dairy Calf Hutch Storage

Photo Description:

Standing on the east side of WSF #3 looking northeast: View of calf hutch storage area in between WSF's & freestall barn. No animals present at time of inspection.

Photo #:	7508
Date/Time of Photo:	7/18/2023 15:00
Photo By:	Brian Hanson
Photo Location:	Main Dairy NW Calf Hutch Area

Photo Description:

Standing on north side of NW Feed Storage/Calf Hutch Area looking south. View of concrete pad previously used to store feed & calf hutches during previous permit terms. Area is currently being used as an equipment storage area.

Photo #:	7449
Date/Time of Photo:	7/18/2023 14:48
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #1

Photo Description:

Standing at the northeast corner of WSF #1 looking south: View of east edge of WSF #1.

Photo #:	7460
Date/Time of Photo:	7/18/2023 14:51
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #1

Photo Description:

Standing at the northwest corner of WSF #1 looking southeast: View of WSF #1.

Photo #:	7462
Date/Time of Photo:	7/18/2023 14:51
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #1

Photo Description:

Standing on the northwest corner of WSF #1 looking southeast: Zoomed in view of south edge of WSF #1. A new concrete overflow channel has been constructed to connect WSF #1 & WSF #3.

Photo #:	7465
Date/Time of Photo:	7/18/2023 14:52
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #1

Photo Description:

Standing at southwest corner of WSF #1 looking east: View of concrete access ramp into WSF #1

Photo #:	7436
Date/Time of Photo:	7/18/2023 14:46
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #2

Photo Description:

Standing on the northeast corner of WSF #2 looking south: View of access ramp located in northeast corner of WSF #2

Photo #:	7437
Date/Time of Photo:	7/18/2023 14:46
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #2

Photo Description:

Standing at the northeast corner of WSF #2 looking southeast: View of permanent marker on east side of WSF #2.

Photo #:	7444
Date/Time of Photo:	7/18/2023 14:46
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #2

Photo Description:

Standing on the north side of WSF #2 looking south: View of western 1/2 of WSF #2.

Photo #:	7446
Date/Time of Photo:	7/18/2023 14:47
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #2

Photo Description:

Standing at the northwest corner of WSF #2 looking south: View of the west edge of WSF #2.

Photo #:	7486
Date/Time of Photo:	7/18/2023 14:55
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #2

Photo Description:

Standing on the south side of WSF #2 looking northwest: View of southwest corner of WSF #2

Photo #:	7466
Date/Time of Photo:	7/18/2023 14:52
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing at the northwest corner of WSF #3 looking southwest: View of northwest corner of WSF #3. Notice new concrete placed as part of ongoing expansion project.

Photo #:	7468
Date/Time of Photo:	7/18/2023 14:52
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on the north side of WSF #3 looking east: View of north edge of WSF #3.

Photo #:	7469
Date/Time of Photo:	7/18/2023 14:52
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on west side of WSF #3 looking east: View of northwest corner of WSF #3. Notice new concrete placed as part of ongoing expansion project.

Photo #:	7475
Date/Time of Photo:	7/18/2023 14:53
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on the west side of WSF #3 looking south: View of west edge of WSF #3. Notice edge of new concrete with rebar protruding and foundry sand being used as sub liner. Construction ongoing in this corner of WSF.

Photo #:	7473
Date/Time of Photo:	7/18/2023 14:53
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on west side of WSF #3 looking southeast: View of southern berm of WSF #3. Notice construction of WSF expansion is underway. Foundry sand is being place as a sub liner below the concrete.

Photo #:	7481
Date/Time of Photo:	7/18/2023 14:54
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on the north side of WSF #3 Looking west: View o of northwest corner of WSF #3

Photo #:	7482
Date/Time of Photo:	7/18/2023 14:54
Photo By:	Brian Hanson
Photo Location:	Main Dairy

Photo Description:

Standing on the north side of WSF #3 looking north: View of newly constructed concrete overflow channel connected WSF #1 to WSF #3.

Photo #:	7494
Date/Time of Photo:	7/18/2023 14:56
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing at the northeast corner of WSF #3 looking southeast: View of northeast corner of WSF #3 that has vertical concrete wall. Notice WSF expansion not yet completed in this corner.

Photo #:	7504
Date/Time of Photo:	7/18/2023 14:57
Photo By:	Brian Hanson
Photo Location:	Main Dairy WSF #3

Photo Description:

Standing on the east side of WSF #3 looking west: View of northeast corner of WSF #3. Notice outlet pipes on left side of photo. One pipe is discharge of Feed Storage Area runoff controls & the other is from the east freestall barns.

Photo #:	7526
Date/Time of Photo:	7/18/2023 15:33
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF # 4

Photo Description:

Standing on the east side of WSF #4 looking south: View of the east edge of WSF #4 near the truck unloading area.

Photo #:	7528
Date/Time of Photo:	7/18/2023 15:34
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the east side of WSF #4 looking northwest: View of the northeast corner of WSF #4.

Photo #:	7531
Date/Time of Photo:	7/18/2023 15:34
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the east side of WSF #4 looking southwest: View of southeast corner of WSF #4.

Photo #:	7533
Date/Time of Photo:	7/18/2023 15:34
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing at the southeast corner of WSF #4 looking southwest: View of permanent markers in southeast corner of WSF #4.

Photo #:	7532
Date/Time of Photo:	7/18/2023 15:34
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the east side of WSF #4 looking west: View of the south 1/2 of WSF #4.

Photo #:	7534
Date/Time of Photo:	7/18/2023 15:35
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the south side of WSF #4 looking west: View of south berm of WSF #4.

Photo #:	7535
Date/Time of Photo:	7/18/2023 15:35
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the south side of WSF #4 looking north: View of east 1/2 of WSF #4.

Photo #:	7537
Date/Time of Photo:	7/18/2023 15:35
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the south side of WSF #4 looking north: View of the western edge of WSF #4.

Photo #:	7546
Date/Time of Photo:	7/18/2023 15:37
Photo By:	Brian Hanson
Photo Location:	Little River Pit WSF #4

Photo Description:

Standing on the west side of WSF #4 looking northeast: View of northwest edge of WSF #4.

Photo #:	7431
Date/Time of Photo:	7/18/2023 14:41
Photo By:	Brian Hanson
Photo Location:	Main Dairy Solid Stacking

Photo Description:

Standing on the west side of the calf barns looking northwest: View of roofed solid stacking area on the west side of calf barns.

Photo #:	7455
Date/Time of Photo:	7/18/2023 14:50
Photo By:	Brian Hanson
Photo Location:	Main Dairy NW Freestall

Photo Description:

Standing north of WSF #1 near freestall barn looking northwest: View of manure reception structure located on east side of building. Manure is pumped to WSF #1 from this structure.

Photo #:	7422
Date/Time of Photo:	7/18/2023 14:38
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the north side of FSA looking east: View of the northern edge of FSA.

Photo #:	7519
Date/Time of Photo:	7/18/2023 15:10
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the north side of FSA looking south: View of northeast corner of FSA. Arrow indicates direction of runoff flow.

Photo #:	7520
Date/Time of Photo:	7/18/2023 15:10
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on north side of FSA looking west: View of north edge of FSA.

Photo #:	7374
Date/Time of Photo:	7/18/2023 14:29
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the east side of FSA looking north: View of east edge of FSA. Arrows indicate direction of runoff flow.

Photo #:	7375
Date/Time of Photo:	7/18/2023 14:29
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the south side of FSA looking west: View of southeast corner of FSA. Arrows indicate direction of runoff flow.

Photo #:	7367
Date/Time of Photo:	7/18/2023 14:28
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the south side of the FSA looking northeast: View of south edge of FSA at runoff collection tank. Arrows indicate direction of runoff flow.

Photo #:	7366
Date/Time of Photo:	7/18/2023 14:28
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the south side of the FSA looking northwest: View of south edge of FSA at runoff collection tank. Arrows indicate direction of runoff flow.

Photo #:	7365
Date/Time of Photo:	7/18/2023 14:28
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the south side of the FSA looking west: View of the south edge of FSA at runoff collection tank. Notice pump & controls at west edge of tank.

Photo #:	7415
Date/Time of Photo:	7/18/2023 14:36
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the south side of FSA looking east: View of south edge of FSA on west side of runoff collection tank. Arrows indicate direction of runoff flow.

Photo #:	7417
Date/Time of Photo:	7/18/2023 14:37
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing at the southwest corner of the FSA looking east: View of south edge of FSA. Arrows indicate direction of runoff flow.

Photo #:	7419
Date/Time of Photo:	7/18/2023 14:37
Photo By:	Brian Hanson
Photo Location:	Main Dairy Feed Storage

Photo Description:

Standing on the west side of FSA looking north: View of west edge of FSA. Arrows indicate direction of runoff flow.

Photo #:	7376
Date/Time of Photo:	7/18/2023 14:29
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing off the south side of the FSA looking west: View of concrete spreader bar on north edge of Vegetated Treatment Area (VTA).

Photo #:	7382
Date/Time of Photo:	7/18/2023 14:30
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing on the south side of concrete spreader pad looking northwest: View of west end of spreader pad. Outlet pipes from runoff collection tank highlighted.

Photo #:	7381
Date/Time of Photo:	7/18/2023 14:30
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing on north end of VTA looking west: View of north end of VTA. Area had been recently reseeded. Notice straw in some areas used to cover the seed.

Photo #:	7389
Date/Time of Photo:	7/18/2023 14:31
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing on the north end of VTA looking south: View of northern end of VTA. Area had recently been reseeded.

Photo #:	7395
Date/Time of Photo:	7/18/2023 14:32
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing in the center of VTA looking southwest: View of center section of VTA. Area is well vegetated.

Photo #:	7385
Date/Time of Photo:	7/18/2023 14:30
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing on the west side of VTA looking north: View of runoff collection system overflow pipes.

Photo #:	7386
Date/Time of Photo:	7/18/2023 14:30
Photo By:	Brian Hanson
Photo Location:	Main Dairy FSA VTA

Photo Description:

Standing on the west side of VTA looking south: View of secondary VTA for runoff collection system overflow pipes shown in photo 7385. Area is well vegetated.

Photo #:	7452
Date/Time of Photo:	7/18/2023 14:48
Photo By:	Brian Hanson
Photo Location:	Main Dairy Stormwater

Photo Description:

Standing on the north side of WSF #1 looking north: View of stormwater inlet on the south side of freestall barns. According to Lepianka this flows northeast to wooded area and outlets on east side of freestall barns.

Photo #:	7458
Date/Time of Photo:	7/18/2023 14:51
Photo By:	Brian Hanson
Photo Location:	Main Dairy Stormwater

Photo Description:

Standing on the west side of WSF #1 looking south: View of stormwater surface flow along west side of WSF #3

Photo #:	7362
Date/Time of Photo:	7/18/2023 13:18
Photo By:	Brian Hanson
Photo Location:	Main Dairy Office

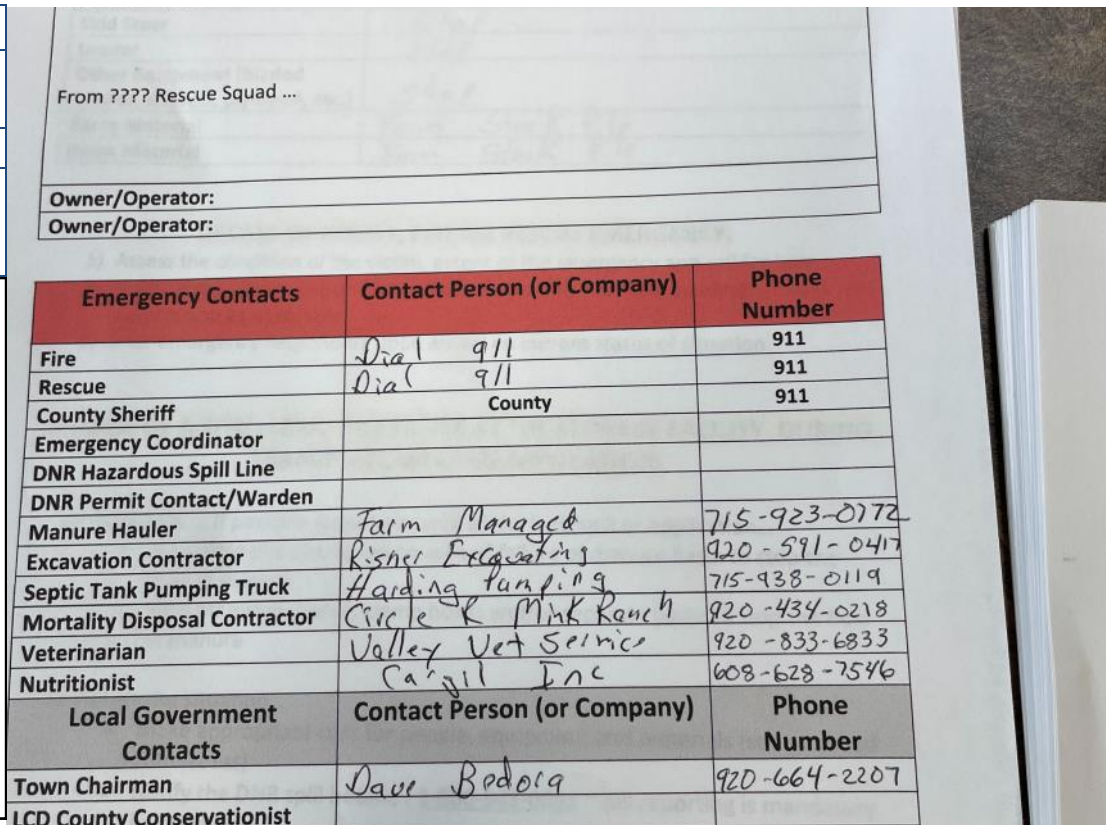
Photo Description:

Photo of WPDES Permit located in the office.

Photo #:	7363
Date/Time of Photo:	7/18/2023 13:18
Photo By:	Brian Hanson
Photo Location:	Main Dairy Office

Photo Description:

Photo of emergency response plan located in the office. Some information missing.



From ???? Rescue Squad ...

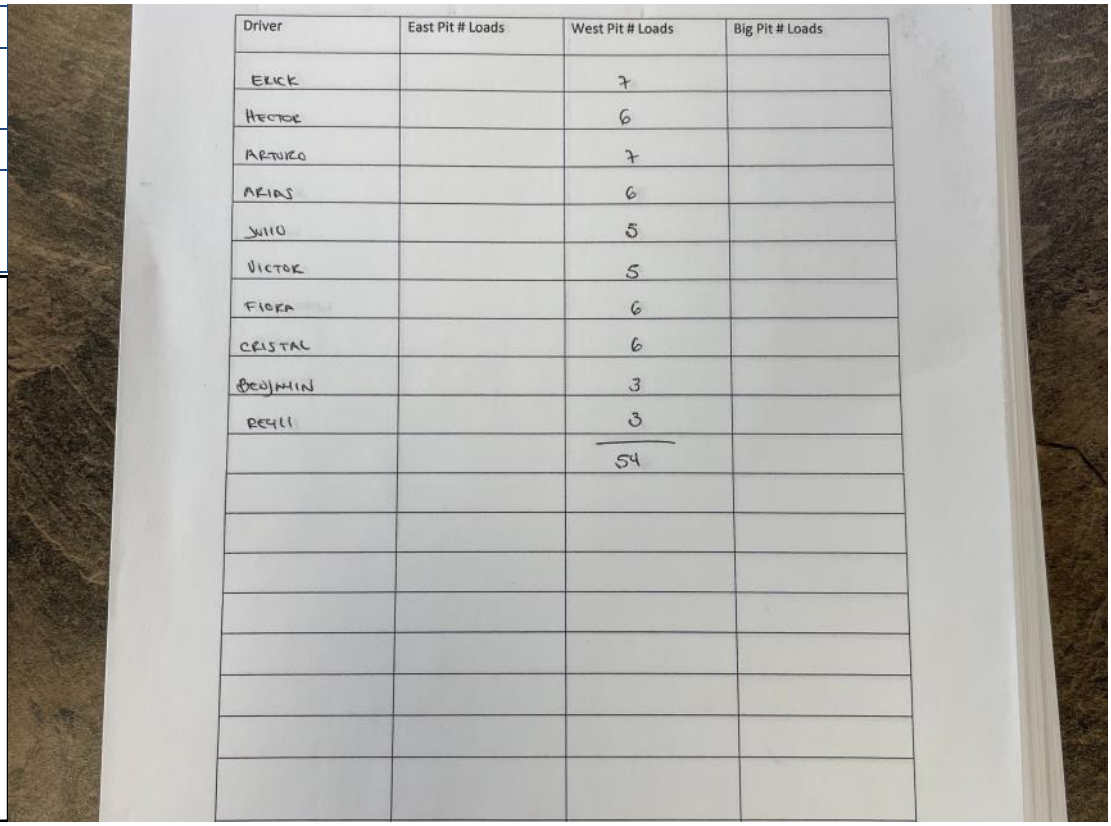
Owner/Operator:
Owner/Operator:

Emergency Contacts	Contact Person (or Company)	Phone Number
Fire	Dial 911	911
Rescue	Dial 911	911
County Sheriff	County	911
Emergency Coordinator		
DNR Hazardous Spill Line		
DNR Permit Contact/Warden		
Manure Hauler	Farm Manager	715-923-0172
Excavation Contractor	Risner Excavating	920-591-0417
Septic Tank Pumping Truck	Harding Pumping	715-938-0119
Mortality Disposal Contractor	Circle K Mink Ranch	920-434-0218
Veterinarian	Valley Vet Service	920-833-6833
Nutritionist	Cargill Inc	608-628-7546
Local Government Contacts	**Contact Person (or Company)**	**Phone Number**
Town Chairman	Dave Bedora	920-664-2207
LCD County Conservationist		

Photo #:	7364
Date/Time of Photo:	7/18/2023 13:19
Photo By:	Brian Hanson
Photo Location:	Main Dairy Office

Photo Description:

Example of daily manure hauling log counting # of truckloads spread that day on a particular field.



Driver	East Pit # Loads	West Pit # Loads	Big Pit # Loads
ERICK		7	
HECTOR		6	
ARTURO		7	
ARIAS		6	
JULIO		5	
VICTOR		5	
FIDEL		6	
CRISTAL		6	
BENJAMIN		3	
REYLI		3	
		54	

SUMMARY:

Substantial Compliance

- The permittee is currently in substantial compliance with the permit.

Areas of Concern

- Continue to monitor, operate, & maintain vegetated treatment area to prevent unpermitted discharges.

Permit Violations

- No violations were observed during the inspection.

Action Items

- Submit Post construction documentation for the WSF #3 expansion project when construction is completed. Project referred to as R-2022-0092.
- Submit permit reissuance application as required by WPDES permit schedule 3.11. Due date of 1/31/2024.

May Be Required in Next Permit Term

No specific requirements now, but will be reviewed after complete application is submitted and compliance status determination at time of permit reissuance.

Materials Required as part of the Permit Application

Required materials must be submitted together as a complete permit application through the ePermitting System: http://dnr.wi.gov/permits/water/. The system will not allow you to electronically sign and submit your application until all of the following are included:

- 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
- 3400-025A form (Animal Units Calculation Worksheet
- 3400-025G form (Evaluated Facilities of Systems Checklist)
- 3400-025C form (Reviewable Facilities of Systems Checklist) A soil survey map of the dairy's production area
- A labeled aerial map showing the existing and proposed features and structures of the dairy's production area
- Calculations documenting days of liquid manure and process wastewater storage
- Supporting documentation for days of storage calculations
- A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
- Plans and specifications for any proposed facilities

Memo from Bill Phelps (DNR Hydrogeologist) dated august 16, 2018)

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: August 16, 2018 **FILE REF:** B&D Dairy

TO: Tom Bauman, Wastewater Engineer – WT/3
Andrea Gruen, Wastewater Specialist – NER/Green Bay
Benjamin Uvaas, Wastewater Specialist – NER/Oshkosh

FROM: Bill Phelps, Hydrogeologist - DG/5

SUBJECT: B&D Dairy – need for groundwater monitoring to determine source of nitrate nitrogen in Dairy production site water supply well

Tom, Andrea, Benjamin - Monitoring at one of the water supply wells ("Calf Facility well") at the B&D Dairy production site has shown that nitrate nitrogen levels in that well have exceeded ch. NR 140, Wis. Adm. Code, groundwater quality standards. In accordance with sections NR 140.24 and NR 140.26 of ch. NR 140, the Department may direct a regulated facility to collect additional information necessary to assess the cause and significance of elevated concentrations of a contaminant in groundwater above ch. NR 140 standards.

It appears that the B&D Dairy production site is located in an area underlain with sandy soils that is susceptible to groundwater contamination and, because there are a number of potential sources of nitrogen contamination present at the Dairy production site, we recommend that a groundwater monitoring system be installed at the site to evaluate whether B&D Dairy production site practices or activities may have contaminated groundwater and caused exceedances of nitrate groundwater quality standards at the facility water supply well.

Background: The B&D Dairy Farm production site, Main Farm and Heifer Farm sites (Attachment 1 - site aerial photo), is located in Sections 25 and 36, T 31N, R 20 E, Town of Beaver, Marinette County, Wisconsin. The Dairy currently houses approximately 6,000 cows and heifers, and annually generates approximately 62,000,000 gallons of liquid manure, 14,000 tons of solid manure, 3,000,000 gallons of feed storage pad leachate and runoff wastewater, and 5,000,000 gallons of runoff wastewater and leachate from calf hutch and feed bunker areas. Monitoring of the "Calf Facility" water supply well at the Dairy production site has shown nitrate levels in that well as high as 21.2 milligrams per liter (mg/L). This concentration exceeds both the 10 mg/L state health-based drinking water standard and the 10 mg/L ch. NR 140 groundwater quality Enforcement Standard for nitrate nitrogen.

Site geology/hydrogeology: Soil borings completed at the B&D Dairy production site describe site soils as "silty sand", "sand", "sand with gravel" and "sand with silt". Water supply well construction reports (WCRs) from the area surrounding the Dairy production site show limestone or sandstone bedrock encountered at depths of between 36' to 95', and reported depths to groundwater, at the time of well construction, ranging from 32' to 52'. It appears that a glacially deposited soil aquifer, hydraulically connected to the underlying bedrock aquifer, is present at the Dairy production site.

Potential production site nitrogen contamination sources: An inspection of the B&D Dairy production site, conducted on April 24, 2017, identified a number of potential sources of nitrogen contamination. These include: wastewater runoff from the two calf hutch areas, wastewater runoff

from a "dry cow" earthen lot, wastewater runoff from cattle feed lots at the Heifer Farm site, feed storage area wastewater runoff, three animal waste and process wastewater storage structures and wastewater runoff from solid manure stacking areas. Dairy operation animal waste, feed storage leachate and process wastewater are known to contain significant levels of potential nitrogen groundwater contaminants, including nitrate and ammonia. Nitrogen in sandy soil environments may convert to the nitrate form, which can readily leach to groundwater.

Need to investigate and required response action if source is production site structure, practice or activity: Chapter NR 140, Wis. Adm. Code, establishes state groundwater quality standards that apply to all facilities, practices and activities which may affect groundwater quality, and which are regulated by the Department under chs. 281 and 283, Stats. The Department regulates large concentrated animal feeding operations (CAFOs) under chs. 281 and 283, Stats. In accordance with s. NR 243.13(5), Wis. Adm. Code, all permitted large CAFOs are required to comply with state groundwater quality standards. Monitoring of the Calf Facility water supply well at the B&D Dairy production site has shown nitrate levels in that well as high as 21.2 mg/L, exceeding ch. NR 140 groundwater quality standards for that contaminant. Chap. NR 140 directs the Department to assess the cause and significance of concentrations of contaminates in groundwater above state groundwater quality standards, and to determine appropriate response actions to minimize the concentration of contaminants in groundwater and prevent exceedances of ch. NR 140 Enforcement Standards.

Recommendations: Available information shows that the proposed B&D Dairy production site is located in an area susceptible to groundwater contamination. Well construction reports and soil boring logs document permeable sandy soils at the Dairy production site. The groundwater aquifer in glacially deposited soils at the production site is hydraulically connected to the underlying limestone and sandstone bedrock aquifer, and a number of potential contamination sources have been identified at the site. Dairy operation animal waste, feed storage leachate and process wastewater are known to contain significant levels of potential groundwater contaminants including nitrogen compounds. Considering that dairy operation animal waste, feed storage leachate and process wastewater might significantly impact local groundwater and potentially cause exceedances of state groundwater quality standards it is recommended that a groundwater monitoring system be installed around the B&D Dairy production site to evaluate whether Dairy production site practices or activities may have contaminated groundwater and caused exceedances of nitrate groundwater standards at the facility water supply well.

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Attachments:

1. **Aerial photograph of B&D Dairy production site (Main Farm and Heifer Farm) from May 4, 2017 DNR inspection report**

Memo from Bill Phelps (DNR Hydrogeologist) dated august 16, 2018)

<u>Attachment 1</u> – Aerial photograph of B&D Dairy production site (Main Farm and Heifer Farm) from May 4, 2017 DNR inspection report